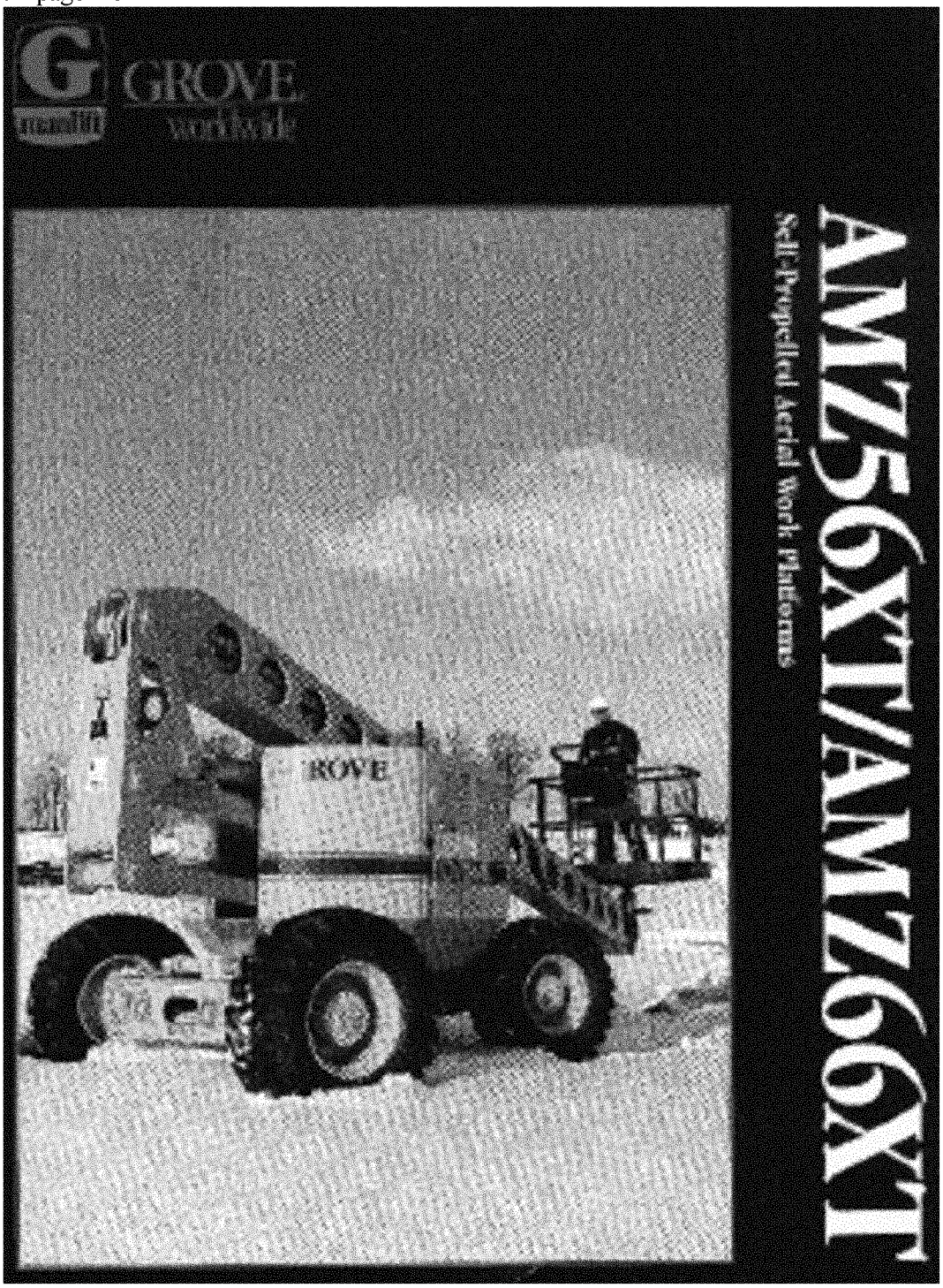
Man Lift – page 1 of 6



Traverse tough terrain with extra traction AMZ56XT and AMZ66XT aerial work platforms from Grove Manlift. Standard four-wheel drive and steering combined with zero tailswing make traveling to work sites fast and easy. Convenient up-and-over reach enables positioning the platform to otherwise inaccessible locations.

Standard Equipment

All-welded 36 x 60 in. (0.91 x 1.52m) tubular aluminum work platform assembly with inside handrails, sliding bar gate and 180° hydraulic platform rotator. 43 in. (1.09m) high railings with 4 in. (0.10m) toeboard.

Proportional joystick controllers with adjustable "ramp to zero" for drive, boom/riser elevation, boom extension/retraction and swing. Non-proportional control switches for steering, platform level and platform rotation. Selection switches for front/rear steer, boom/riser lift, drive/torque, and low/high engine speed. A patented control circuit prevents inadvertent functioning of all machine motion controls. Buttons for auxiliary power, engine start, choke, and emergency stop. Fully controllable from ground level.

All-steel, 2-section Vierendeel-embossed trapezoidal boom. Telescoping boom sections supported by adjustable aluminum bronze wear pads. Internal boom power guide routes hydraulic and electric lines to platform.

Patented centerline boom design features mechanical parallelogram riser.

Double-acting lift cylinder with integral holding valves provides boom elevation from -16.5° to 73.5° above horizontal (-17° to 75° on AMZ66XT).

Double-acting boom telescope cylinder with integral holding valve.

Ball bearing swing circle with 360° continuous rotation. Hydraulically-driven worm gear gearbox. Plunger-type mechanical house lock.

Pressure/flow compensated, variable displacement axial piston hydraulic pump with 35 gpm (132 lpm) capacity. Maximum system operating pressure of 3500 psi (241 bar).

Electrically-activated, proportionally-controlled main hydraulic valve bank provides simultaneous functioning of drive, lift, telescope and swing systems. Non-proportional valve bank controls steering, platform rotator and platform level.

15 micron hydraulic pressure filter, 10 micron return filter, fill strainer and magnetic plug in reservoir.

25 gal. (95 liter) hydraulic reservoir with sight gauge.

Nissan H20 4-cylinder water-cooled gasoline engine with 53 hp @ 3,000 rpm.

25 gal. (95 liter) steel fuel tank with gauge.

12-volt DC negative ground battery with 625 CCA @ 0° F (-17° C). 50 amp alternator.

Options

36 x 72 in. (0.91 x 1.83m) platform.

36 x 96 in. (0.91 x 2.44m) platform (standard chassis only).

110-volt AC wiring to platform with plug and junction box on turntable and two outlets on platform, 15-amp resettable circuit breaker, and ground fault interrupter.

2000-watt 110-volt AC generator with two outlets on platform.

120 psi (8.27 bar) air power to platform with quick disconnect on turntable.

Halogen worklights on platform.

Nissan 4-cylinder water-cooled dual fuel engine with 53 hp @ 3,000 rpm.

Deutz F3L-912 2-cylinder air-cooled diesel engine with 55 hp @ 2,800 rpm.

Amber strobe lights.

Halogen travel lights.

Fire extinguisher.

6 ft. 11 in. (2.11m) wide chassis.

15 x 19.5 - 12PR foam-filled tires.

38 x 20 x 16.1 - 10 PR Terra grip or Terra rib pneumatic tires (with 7 ft. 6 in. [2.29m] chassis only).

Pinion and bearing guard.

Special paint.

Hostile Environment Protection Package

Specifications AMZ56XT

Platform

Working Height	56 ft. (17.07m)
Platform Height	50 ft. (15.24m)
Horizontal Reach w/ Riser Elevated	33 ft. (10.06m)
Riser Height	15 ft. (4.57m)
Platform Capacity	800 lbs. (363 kg)

Dimensions

Platform Size	36 x 60 in. (0.91 x 1.52m)
Overall Height (stowed)	8 ft. 6 in. (2.59m)
Overall Length	21 ft. 3 in. (6.48m)
Width (A)	
Standard Chassis	7 ft. 6 in. (2.29m)
Optional Chassis	6 ft. 11 in. (2.11m)
Track (B)	
Stanard Chassis	5 ft. 9 in. (1.76m)
Optional Chassis	5 ft. 6.5 in. (1.69m)
Turning Radius (inside)	
Standard Chassis	
4 Wheel Steer	6 ft. 1 in. (1.85m)
2 Wheel Steer	12 ft. (3.66m)
Optional Chassis	
4 Wheel Steer	6 ft. 6 in. (1.98m)
2 Wheel Steer	12 ft. 5 in. (3.78m)
Turning Radius (outside)	
Standard Chassis	
4 Wheel Steer	13 ft. 5 in. (4.09m)
2 Wheel Steer	22 ft. 11 in. (6.99m)
Optional Chassis	
4 Wheel Steer	13 ft. (3.96m)
2 Wheel Steer	22 ft 6 in. (6.86m)
Tailswing (C)	6 ft. 10 in. (2.08m)
Wheelbase	8 ft. (2.44m)
Ground Clearance	12 in. (0.30m)

Performance

Maximum Drive Speed	3.0 mph (4.8 km/h)
Gradeability	45%
Tire Size	15 x 19.5 - 12PR
Tire Fill	Air
Swing Speed	0.5 rpm

Power Source

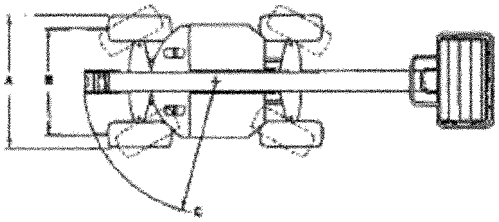
Engine Make/Model	Nissan H20
Engine Horsepower	53 hp @ 3,000 rpm
Fuel Tank Capacity	25 gal. (95 liters)

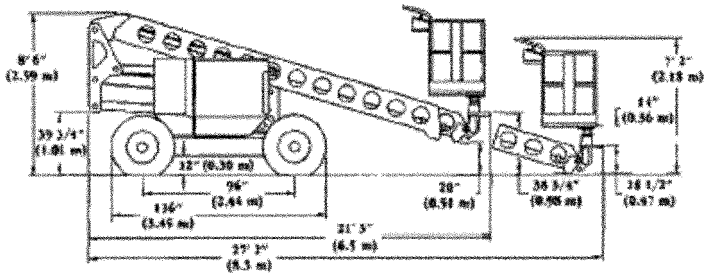
Hydraulics

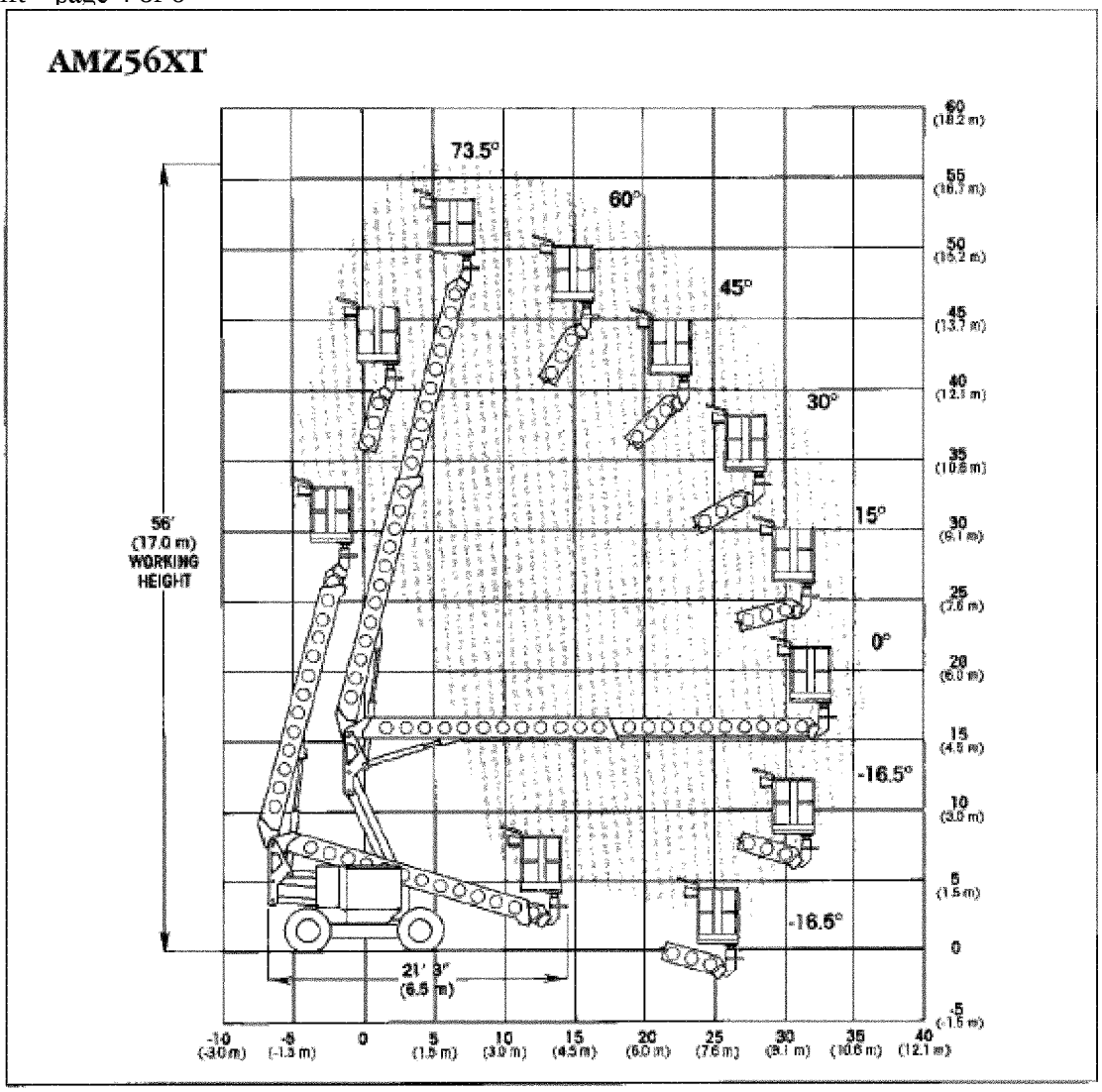
Reservoir Capacity	25 gal. (95 liters)
Hydraulic Pump Type	Piston
Auxiliary Power	Yes

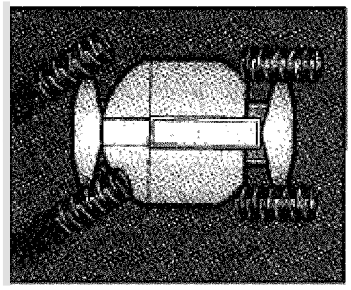
Shipping Information

Weight	23,300 lbs. (10570 kg)
Shipping Cube	1,355 cu. ft. (38.4 m^3)

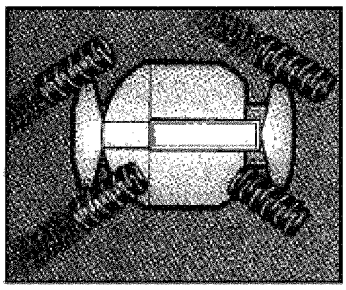




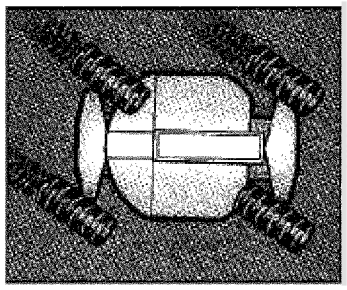




Front - or - Rear Only



Four-Wheel Coordinated



Four-Wheel Crab

Independent front and rear steering is a standard feature. Controls may be used separately or in combination. Front or rear steering only provides exceptional straight-line control. Four-wheel coordinated steering results in the tightest inside turning radius in this class of machines. And four-wheel crab steering permits sideways maneuvering along walls or other obstructions.

Specifications AMZ66XT

Platform

Working Height	66 ft. (20.12m)
Platform Height	60 ft. (18.29m)
Horizontal Reach	
w/ Riser Elevated	43 ft. (13.11m)
Riser Height	15 ft. (4.57m)
Platform Capacity	
Standard Chassis [1]	600 lbs. (272 kg)
Optional Chassis [2]	500 lbs. (227 kg)
Standard Chassis[3]	500 lbs. (227 kg)

Optional Chassis	5 ft. 6.5 in. (1.69 m)
Turning Radius (Inside)	
Standard Chassis	
4 Wheel Steer	6 ft. 1 in. (1.85m)
2 Wheel Steer	12 ft. (3.66m)
Optional Chassis	
4 Wheel Steer	6 ft. 6 in. (1.98m)
2 Wheel Steer	12 ft. 5 in. (3.78m)
Turning Radius (Outside)	
Standard Chassis	
4 Wheel Steer	13 ft. 5 in. (4.09m)
2 Wheel Steer	22 ft. 11 in. (6.99m)
Optional Chassis	
4 Wheel Steer	13 ft. (3.96m)
2 Wheel Steer	22 ft. 6 in. (6.86m)
Tailswing (C)	6 ft. 10 in. (2.08m)
Wheelbase	8 ft. (2.44m)
Ground Clearance	12 in. (0.30m)

Performance

Maximum Drive Speed	3.0 mph (4.8 km/h)
Gradeability	45%
Tire Size	15 x 19.5 - 12PR
Tire Fill	Air
Swing Speed	0.5 rpm

Power Source

Engine Make/Model	Nissan H20
Engine Horsepower	55 hp @ 3,000 rpm
Fuel Tank Capacity	25 gal. (95 liters)

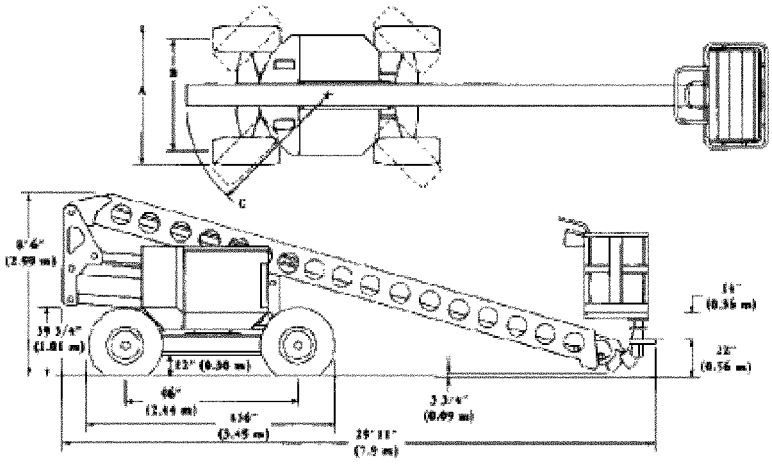
Hydraulics

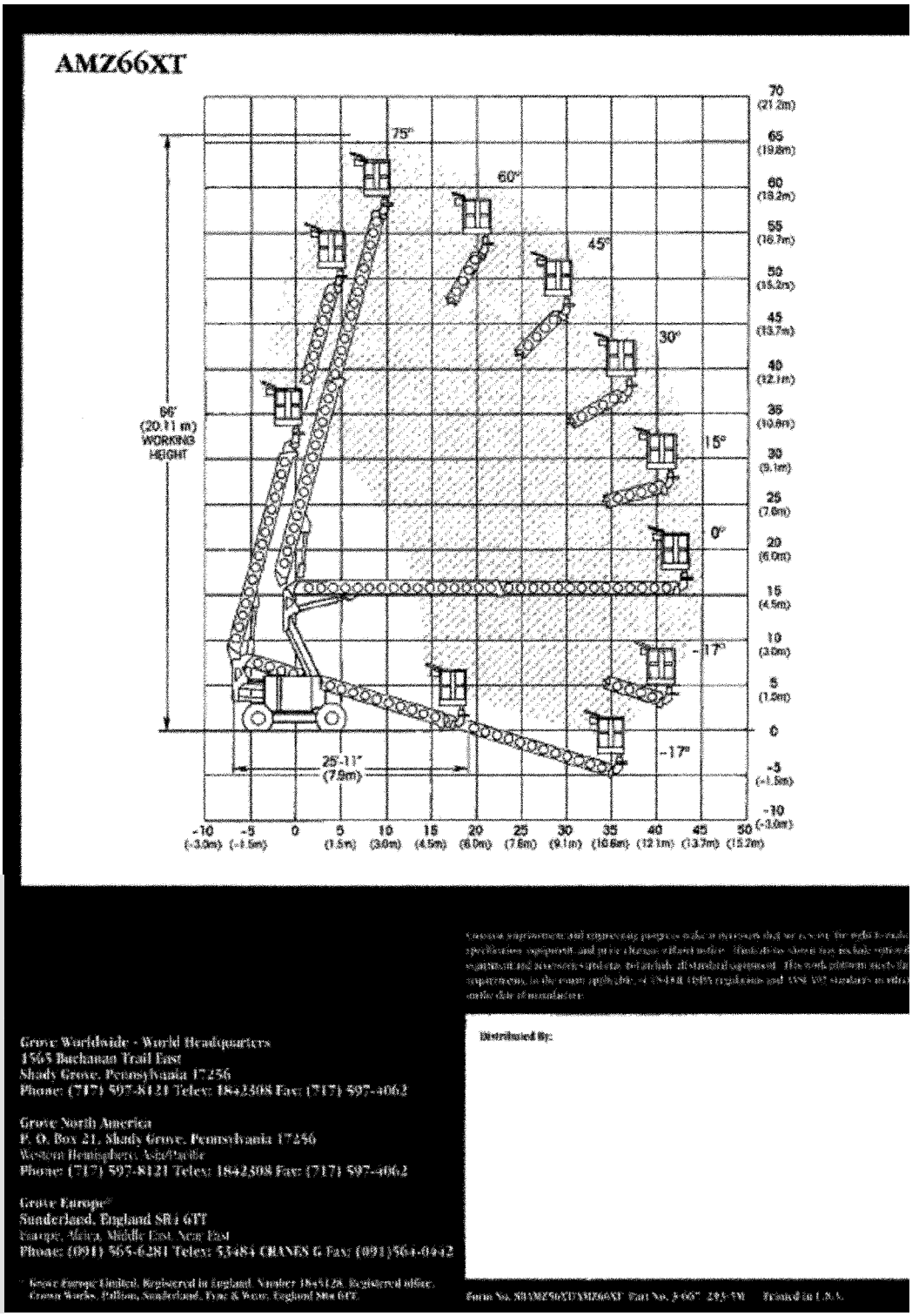
Reservoir Capacity	25 gal. (95 liters)
Hydraulic Pump Type	Pisson
Auxiliary Power	Yes

Shipping Information

Weight	23,500 lbs. (10660 kg)
Shipping Cube	1,623 cu. ft. (46.0 m³)

[1] With 60 in. (1.52m) or optional 72 in. (1.83m) platform.
[2] With 60 in. (1.52m) or optional 72 in. (1.83m) platform.
[3] With optional 96 in. (2.44m) platform.




AMZ66XT
75°
60°
45°
30°
15°
0°
-17°
66'
(20.11 m)
WORKING
HEIGHT
25'-11"
(7.9m)
70 (21.2m)
65 (19.8m)
60 (18.2m)
55 (16.7m)
50 (15.2m)
45 (13.7m)
40 (12.1m)
35 (10.6m)
30 (9.1m)
25 (7.6m)
20 (6.0m)
15 (4.5m)
10 (3.0m)
5 (1.5m)
0
-5 (-1.5m)
-10 (-3.0m)
-10 (-3.0m) -5 (-1.5m) 0 5 (1.5m) 10 (3.0m) 15 (4.5m) 20 (6.0m) 25 (7.6m) 30 (9.1m) 35 (10.6m) 40 (12.1m) 45 (13.7m) 50 (15.2m)
Grove Worldwide - World Headquarters
1565 Buchanan Trail East
Shady Grove, Pennsylvania 17256
Phone: (717) 597-8121 Telex: 1842308 Fax: (717) 597-4062
Grove North America
P. O. Box 21, Shady Grove, Pennsylvania 17256
Western Hemisphere, Asia/Pacific
Phone: (717) 597-8121 Telex: 1842308 Fax: (717) 597-4062
Grove Europe*
Sunderland, England SR1 6TT
Europe, Africa, Middle East, Near East
Phone: (091) 565-6281 Telex: 53484 CRANES G Fax: (091)564-0442
Distributed By:

Retrieval Box – page 1 of 2

Waste Transport Box – Pit 9, Stage 3 May 27,2003

Quantity: 40 boxes

Nominal Dimensions: 5' x 5' x 10' (outside surfaces of plate)

Material, per box (all carbon steel):

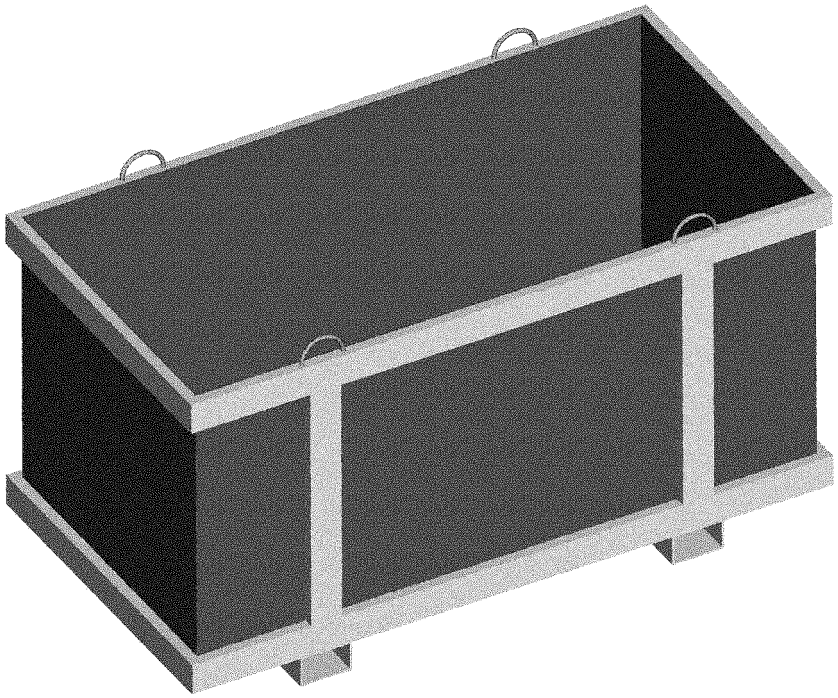
¼" x 5' x 10' plate - 4 required

- 6" x 10.5 lb channel x 124" long - 4 required
- 6" x 10.5 lb channel x 64" long - 4 required
- 6" x 10.5 lb channel x 48" long - 4 required
- 6" x 10" x 3/8" rectangular tubing x 63.5" long - 2 required
- 6" x 10" x 3/8" rectangular tubing x 62" long - 2 required
- ¾" diameter rod x 26" long - 4 required

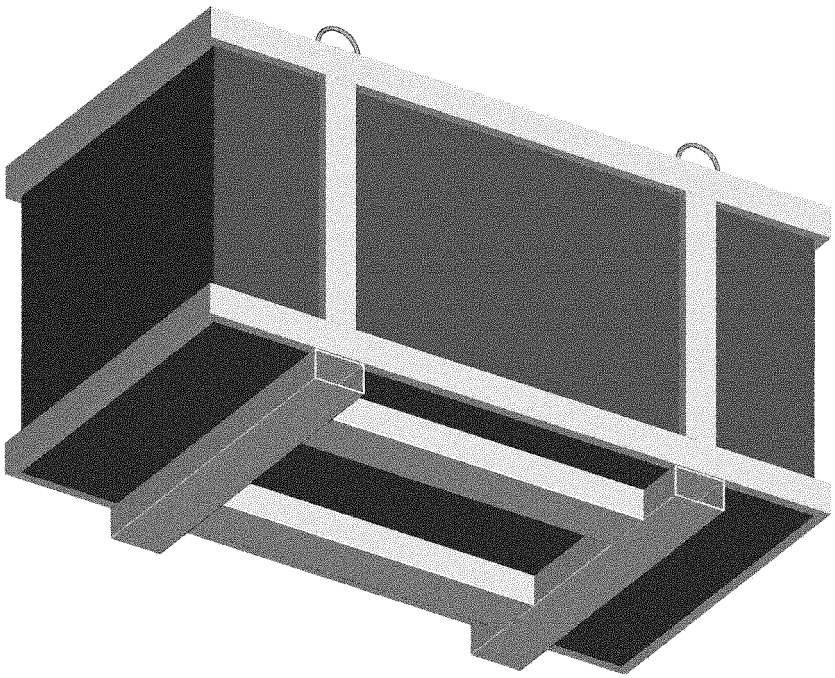
All joints welded. (Seal welded if not structurally necessary.)

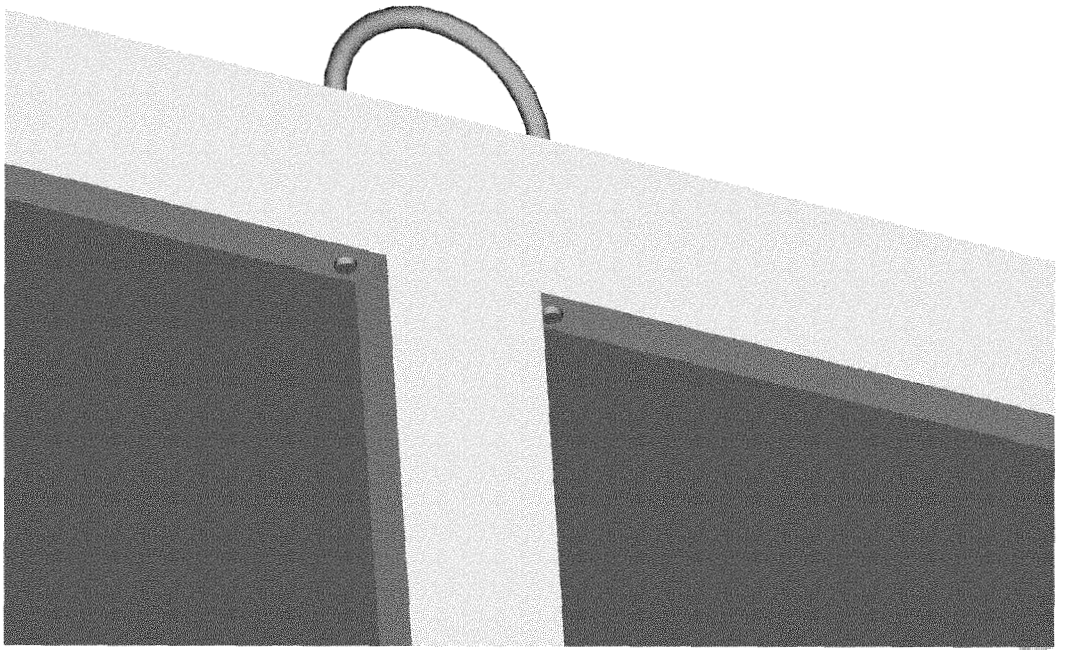
Contact:

Steve Hills
526-8347
hll@inel.gov



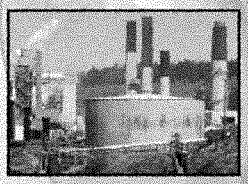
Retrieval Box – page 2 of 2





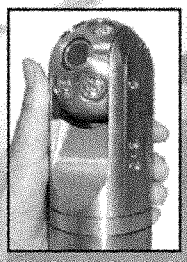
INUKTUN SPECTRUM 60 PT

CRAFTSMANSHIP IN HIGH TECHNOLOGY



SPECTRUM PT color cameras are compact and powerful providing the perfect solution to a wide range of inspection challenges unique to every industry.

- High quality images
- Miniature size
- Proportional pan and tilt functions
- Light weight
- Robust and reliable
- Operates on land or completely submerged
- Precise controls



Applications:

- Toxic Environment Inspection
- Underwater Inspection
- Caisson Inspection
- Nuclear Fuel Pool Inspection
- Dam and Lock Inspection
- Reactor Vessel Inspection
- Small Diameter Pipe Inspection
- FOSAR (Foreign Object Search and Retrieval)
- Robotics and Remote Tooling
- ROV Integration
- Corrosion Evaluation
- Remote Monitoring

Specifications:

Camera:

Type:	WDCC-6300S Weldex
Pick-up-Element:	1/3" CCD
Resolution:	570 TV lines
Focus:	Manual
Iris:	Auto-electronic
Sensitivity:	<1 lux
Construction:	6061-T6 Aluminum*
Weight:	1.1kg/2.5lbs.

** Titanium or Stainless Steel optional*

Operating Environment:

Temp:	0°-50° C (32°-122° F)
Depth Rating:	30m/100ft.

Lights:

4 Argon Lights
12W in air 24W in water
Variable Intensity

Pan &Tilt:

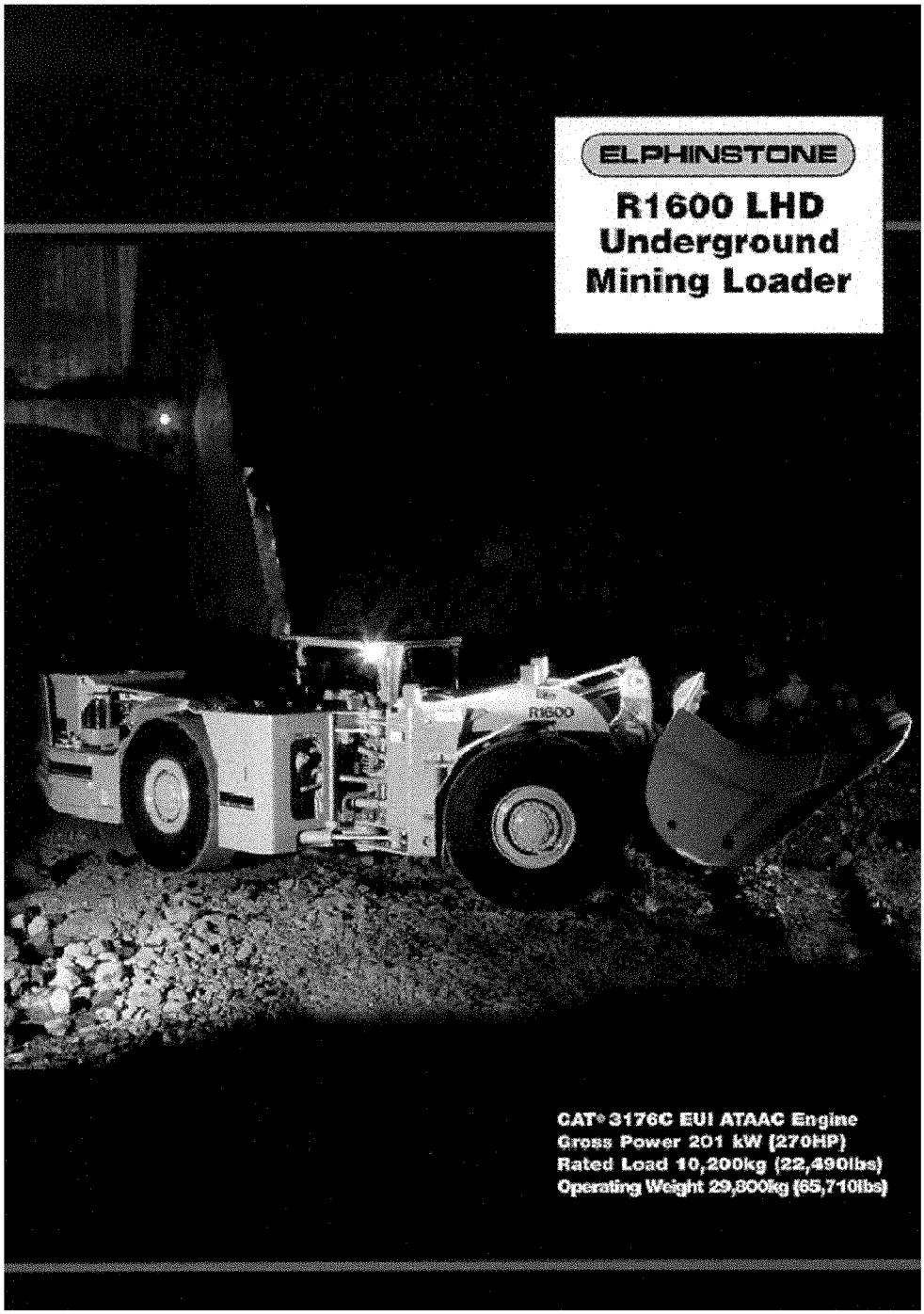
	Pan	Tilt
Range:	+/- 170° 360° visible	280° total
Horizontal FOV:	58° (in air)	
Clutch:	Yes	Yes
Size:	63.5mm/2.5in Diameter 178mm/7in Length	

Control Unit:

Power:	110/220 VAC
Weight:	9kg/20.5lb
Dimensions:	431mm W x 304mm L x 88mm H 17in W x 12in L x 3.5in H
Chassis:	19" rack mount

Specifications subject to change without prior notice
Printed in Canada

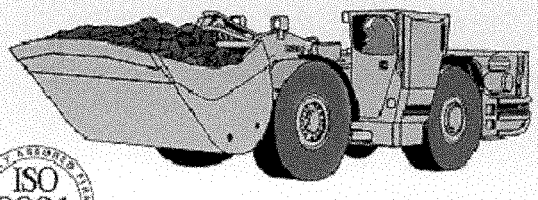
Front End Loader – page 1 of 2

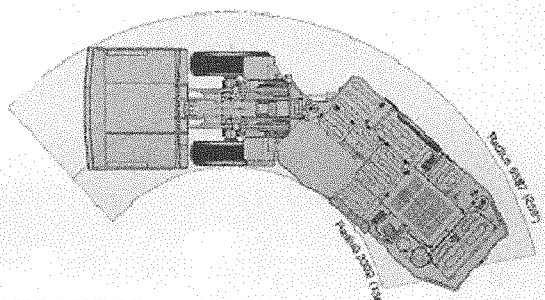


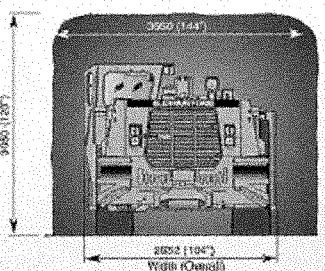
R1600 LHD

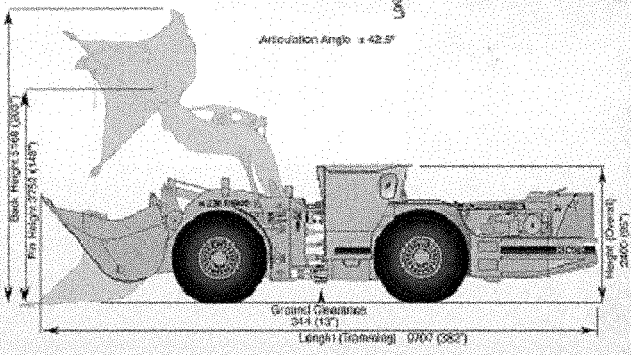
Underground Mining Loader

Flywheel Power	201kW	(270HP)
Engine Model Cat® 3176C ELH ATAAC		
Speeds Forward	KPH	(MPH)
1st	5.5	(3.4)
2nd	9.8	(6.1)
3rd	17.5	(10.9)
4th	30.6	(19.0)
Speeds Reverse		
1st	6.2	(3.8)
2nd	11.5	(7.0)
3rd	19.8	(12.4)
4th	34.6	(21.7)
Tyre Size 18.00 x 25, 20 PLY E-5 STEEL		
Hydraulic Cycle Time		(Secs.)
Raise		7.6
Dump		1.5
Lower (Empty, Float Down)		3.0
Total		11.2
Dimensions		
Rated Payload	16,000kg's	(35,496lbs)
Bucket Capacity	4.8m3	(6.3cu.yds)
Width (Overall)	2690mm	(182.4")
Height (Overall)	2400mm	(95")
Length (Tramming)	9700mm	(382")
Turning Radius	6587mm	(259")
Weight (Empty)	25,600kg's	(56,710lbs)
Weight (Loaded)	40,000kg's	(88,200lbs)
Axle Oscillation	±10°	
Articulation Angle	±42.5°	
Ground Clearance	344mm	(13")









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ELPHINSTONE

CATERPILLAR ELPHINSTONE PTY. LTD.

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Phone: (Int) 61 3 6431 2311 (Local) 03 6431 2311
Fax: (Int) 61 3 6431 7262 (Local) 03 6431 7262
Email: epdinfo@ecpl.com

AREA ELPHINSTONE DEALER

R1600 (EP1518) - 02 A4 (1999)

Manufactured in Australia for World Export

WBM WELDCO-BEALES MFG. INC.
SPECIALISTS IN EQUIPMENT DESIGN AND MANUFACTURING
BETTER BY DESIGN

WHEEL LOADER ATTACHMENTS
FOR WHEELED AND TRACK LOADERS

HAVE TOTAL UTILITY FOR YOUR LOADER

TAKES SECONDS TO CHANGE ATTACHMENTS

FOR A QUICK CHANGE USE KWIK-A-TACH

-K-A-TACH

PROFILE HOOKS
Profile hooks are designed for bucket use. Hooks are trimmed to fit the specific bucket, some cutting may be necessary upon installation.

BLANK HOOKS
Blank hooks are designed to adapt buckets and other existing attachments. The hooks provide ample material for the correct on installation.

CHOOSE YOUR POWER SOURCE FOR KWIK-A-TACH

Loader with two spool valve	+	Kwik-A-Tach	+	12/24 volt pump kit	=	Operation with non-hydraulic attachments
Loader with three spool valve	+	Kwik-A-Tach	+	3rd valve connection kit	=	Operation with non-hydraulic attachments
Loader with three spool valve	+	Kwik-A-Tach	+	3rd valve connection and power beyond kit	=	Operation with non-Hydraulic and hydraulic attachments

PUMP KIT
12 or 24 volt power source complete with hoses.

QUICK COUPLER MASTER HITCH

- Operates hydraulically from cab
- Use loader hydraulics or optional pump kit
- Change attachments in minutes
- Add versatility to wheel loaders

BUCKETS - GENERAL PURPOSE

- Great loading capabilities
- Tapered or flat bottom
- Bolt on cutting edge available
- Chip Buckets

BUCKETS - FEEDLOT

- Full width clamp
- Twin hydraulic cylinders
- Teeth or bolt on cutting edges available
- Coral Cleaning Buckets
- Bale / Silage Handler

BUCKETS - ROLL OUT

- Increased dump height
- Increased dump reach
- Maximize material capacity

PALLET FORK RACK

- Variety of carriage widths and fork lengths
- Fork locks and swing lock available
- Optional fork positioners
- Optional backrest configurations

PARALLELOGRAM PIPE & POLE FORKS

- Wider carriage than standard forks
- Clamp works parallel to top of forks
- Clamp folds out of the way for large pipe

LOG GRAPPLE

- Tree length or shortwood
- 2, 3, or 4 tine models
- Excellent visibility
- Extreme wear packages
- Pelican Grapple

DOZER BLADE - STRAIGHT

- Various heights and widths available
- Reversable cutting edges
- Ideal for backfilling, snow removal

DOZER BLADE - ANGLE / U.V.

- Hydraulic or manual angle
- Optional skid shoes
- Corner bits and reversible cutting edges
- Ramp Hogg

JIB BOOM

- Fixed length or extendible (telescopic)
- Manual or hydraulic extension
- Hydraulic winch options available